

REMARKS

Claims 1-13 are all the claims pending in the application. Claims 1-13 presently stand rejected.

Specification

The Examiner has objected to the Specification because it includes improper idiomatic English and is not in compliance with 37 C.F.R. § 1.52(a) and (b). Applicant has prepared a Substitute Specification and Redline Specification which are submitted herewith.

Also, the abstract has been amended to improve readability.

Drawings

The Examiner has not indicated approval of the drawings filed October 6, 2003, in response to the Notice to File Corrected Application Papers. Accordingly Applicant submits herewith seven (7) replacement drawing sheets, including sheet 7/7 wherein Fig. 8 has been labeled as --Prior Art--.

Claim Rejections - 35 U.S.C. § 112

Claims 1-13 are rejected under 35 U.S.C. § 112, second paragraph. The claims have been amended to improve the precision of language.

Claim Rejections - 35 U.S.C. § 102/103

Claims 1, 3-5 and 7-13 are rejected under 35 U.S.C. § 102(b) as being anticipated by Bystrom et al. (5,924,826).

Claims 1, 3-5 and 7-13 are rejected under 35 U.S.C. § 102(e) as being anticipated by Persson et al. (6,736,574).

Claim 2 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Bystrom et al. (5,924,826) and Persson et al. (6,736,574).

Claim 6 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Bystrom et al. (5,924,826) or Persson et al. (6,736,574), in view of Wiman et al. (5,810,518).

Analysis

Claims 1 and 7 are the only claims in independent form; therefore, the following discussion is initially directed to these independent claims. Applicant respectfully traverses each of these rejections because the references fail to teach or suggest all the elements as set forth and arranged in the claims.

Claim 1 is rejected by each of Bystrom and Persson.

Bystrom is directed to cutting insert and holder. However, Bystrom does not disclose a convex line missing part as claimed. Specifically, claim 1 sets forth a convex line missing part formed on the parallelogram shaped body of the insert. This convex line missing part is a flat area, and is provided in a region that includes the periphery of the opening edge of the screw insertion hole. See Fig. 6. See also pages 7-8 of the Specification. This structure assists in stabilizing the insert on the tip mounting face (see page 9 of the Specification).

Bystrom teaches that the ribs terminate a distance D from the rear borderline of the holding surface (col. 3, lines 1-6). With respect to the insert element, there is no teaching or suggestion that the grooves 11 terminate at any particular portion. In fact, Fig. 6 illustrates the grooves formed continuously over the whole insert surface.

In view of the foregoing, Bystrom fails to anticipate claim 1.

Persson is also directed to a cutting insert and holder. The insert portion of Persson is divided into two parts, 13 and 15. Both of these elements have screw holes and are accordingly clamped to the holder 5. This reference fails to provide any teaching that the surface of the insert, which opposes the tip mounting face of the holder 5, should have a flat convex line missing part. The undersides of the insert are not shown; however, the bottom sides of the insert seat plate 13 and the cutting insert 15 have ridge teeth (col. 3, lines 55-67). There is no teaching or suggestion that a portion of the undersides of the seat plate 13 or the cutting insert 15 should have a flat convex line missing part. Still further, there is no suggestion that such a flat part

should be formed around the periphery of the opening of the insertion hole. Therefore, Persson does not anticipate claim 1.

Still further, the embodiment illustrated in Fig. 6 does not have any grooves on the section of the holder, but claim 1 is directed to have such flat part on the insert.

In view of the foregoing, claim 1 is not anticipated by Persson.

Turning to claim 7, Bystrom fails to anticipate claim 7 for the same reasons discussed above regarding claim 1. Namely, Bystrom fails to teach or suggest that a flat convex line missing part should be formed in an area of the holder which would include a periphery of the opening edge of the female thread hole on the tip mounting surface. At most, Bystrom merely discloses a gap D which does not include ribs; however, this area is not associated with the hole 10, and moreover, this reference specifically teaches that the threaded hole 10 extends through the middle rib (col. 3, lines 9-10 and col. 4, lines 7-8). Thus, there must necessarily be a convex portion around the opening of the female thread hole.

In view of the foregoing, claim 7 is not anticipated by Bystrom.

Finally, Applicant traverses the rejection of claim 7 based on Persson because the insert seat plate 13 is not an insert. Only the insert 15 is a cutting insert, and thus, the insert seat plate 13 is not an insert as set forth in claim 7, because the claim 7 insert has two cutting edges (by way of non-limiting example, 3b in Fig. 7). In Persson, only the cutting insert 15 is described as a cutting member. Thus, it is only to this portion of the device, and the portion of the holder facing the cutting insert 15, to which such a flat portion would be applicable. As shown in Fig. 6 of Persson, at most there is only a suggestion to make the entire portion opposing the cutting insert as flat. Yet, claim 7 sets forth that the convex lines are formed on a tip mounting face of the holder, i.e., the portion of the holder on which the insert is mounted. Thus, Persson fails to anticipate claim 7.

The remaining rejections are directed to the dependent claims. These claims are patentable for at least the same reasons as the independent claims discussed above, by virtue of their dependency therefrom.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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AMENDMENTS TO THE DRAWINGS

Applicant encloses herewith an annotated marked-up drawing, in which Fig. 8 has been amended to include the legend --Prior Art--. Additionally, Applicant resubmits herewith seven (7) sheets of replacement drawings which incorporate the change to Fig. 8 and are intended to replace the informal drawings originally filed on June 24, 2003. These replacement drawings are being resubmitted because the Examiner never acknowledged receipt of the drawings filed on October 6, 2003.

Attachment: Annotated Marked-Up Drawing
Replacement Sheets



7/7

FIG. 8 *PRIOR ART*

